

# GO REGULATOR

## BP-8LF Series

High Sensitivity Back Pressure Regulators

### Introduction

The BP-8LF Series back pressure regulator is designed to furnish precise low back pressure control in analytical instrumentation. With the combination of the large diaphragm sensing area of the BP-8 Series Regulator and the low flow seat assembly of the BP-3 Series pressure regulator, pressure control down to 10 inches of water is easily obtainable.



pressure regulators

### Typical Applications

- Analytical instrumentation
- Gas and liquid sampling
- Research labs

### Technical Data

<b>CONSTRUCTION</b>	316L stainless steel (standard) Monel® or Hastelloy® C-276 (optional)
<b>ADJUSTABLE STANDARD PRESSURE RANGES</b>	0–6, 0–25, 0–50, 0–75, 0–125, 0–250 & 0–500 psig
<b>OPERATING TEMPERATURE</b>	–40° F to +500° F (–40° C to +260° C)
<b>C<sub>v</sub> COEFFICIENT</b>	0.2 (standard) 0.03, 0.05, 0.06, 0.12, 0.24, 0.3, 0.095, 0.025, 0.04, 0.005, 0.01 (optional)
<b>INLET &amp; OUTLET CONNECTIONS</b>	¼" FNPT

### Features & Benefits

- Sensitive pressure control
- Low pressure adjustability
- Standard PTFE / Viton® diaphragm

### Options

- PTFE / stainless steel diaphragm

### GO Regulator

405 Centura Court • PO Box 4866 (29305) • Spartanburg, SC 29303  
Phone (864) 574-7966 Fax (864) 574-5608  
www.goreg.com • sales@goreg.com

# High Sensitivity Back Pressure Regulators

## Maximum Temperature and Control Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM CONTROL RANGE
Viton®	250° F (121° C)	@	500 psig (5.16 MPa)
Kalrez®	300° F (148° C)	@	500 psig (5.16 MPa)
High density PTFE	200° F (93° C)	@	500 psig (5.16 MPa)
Polyimide	500° F (260° C)	@	500 psig (5.16 MPa)

Temperatures in excess of 175° F (80° C) require the use of a T-handle or the tamper proof option.

## How to Order

For additional configurations, consult the factory. **Standard items in bold.**

**BP8L – 1 A 1 1 D 5 D 1 2 1**

**Body Material**

- 1 316L stainless steel**
- 2 Brass
- 4 Monel®

**Port Configuration**

**A Standard (body "A")**  
See pg. 28 for port locations.

**Process Port Types**

- 1 ¼" FNPT (¼" FNPT gauge ports)**
- 2 ¼" tube stub, 2" long (¼" FNPT gauge ports)
- 4 ⅜" FNPT (¼" FNPT gauge ports)
- 5 ½" FNPT (¼" FNPT gauge ports)
- 6 ½" tube stub, 2" long (¼" FNPT gauge ports)

**Cavity Finish**

- 1 < 25 Ra**

**Actuator Material**

- B CF PTFE**
- C Polyimide
- D Viton®**
- I High density PTFE**
- K Kalrez®

**Cap Assembly**

- 1 Standard, stainless steel**
- 2 T-handle, stainless steel
- 3 T-handle, panel mount, stainless steel
- 4 Panel mount, stainless steel
- 5 Captured vent, aluminum
- 6 Captured vent, panel mount, aluminum
- 7 Captured vent, stainless steel
- 8 Tamper-proof, stainless steel
- 9 Fine adjust, ½" panel mount, stainless steel

**Diaphragm Facing/Backing Material**

- 1 PTFE / stainless steel**
- 2 PTFE / Viton®**
- 5 Viton® / stainless steel
- 6 Tefzel® ring / stainless steel
- 7 Tefzel® ring / Hastelloy® C-276
- 8 PTFE / Inconel®
- 0 PTFE / Hastelloy® C-276

**Diaphragm Type**

- 1 Standard diaphragm**

**Control Range**

- B 0– psig**
- D 0–25 psig**
- E 0–50 psig**
- F 0–75 psig**
- H 0–125 psig**
- I 0–250 psig**
- J 0–500 psig**

**Flow Coefficient (C<sub>v</sub>)**

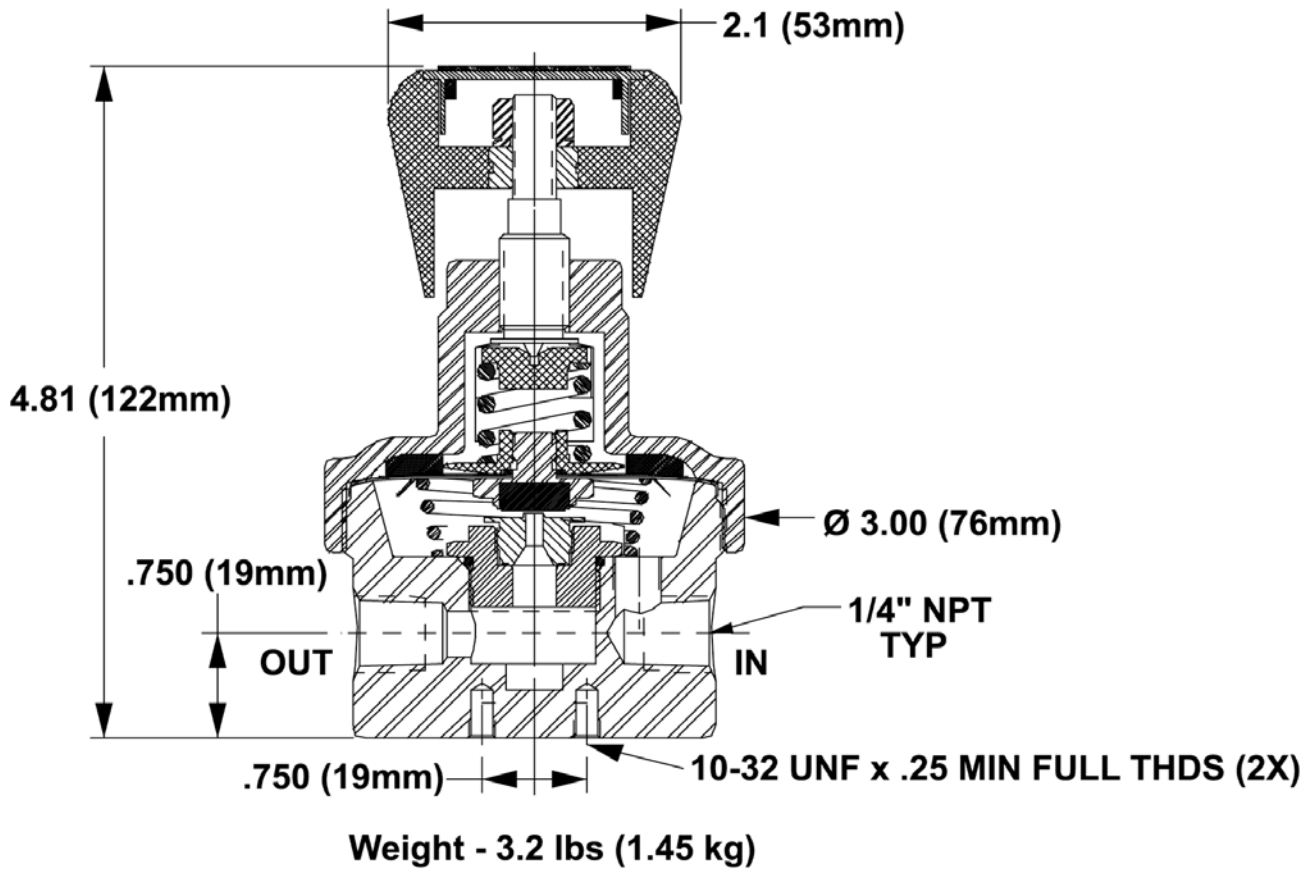
- 5 0.2**

NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at [www.goreg.com](http://www.goreg.com) or contact the factory.

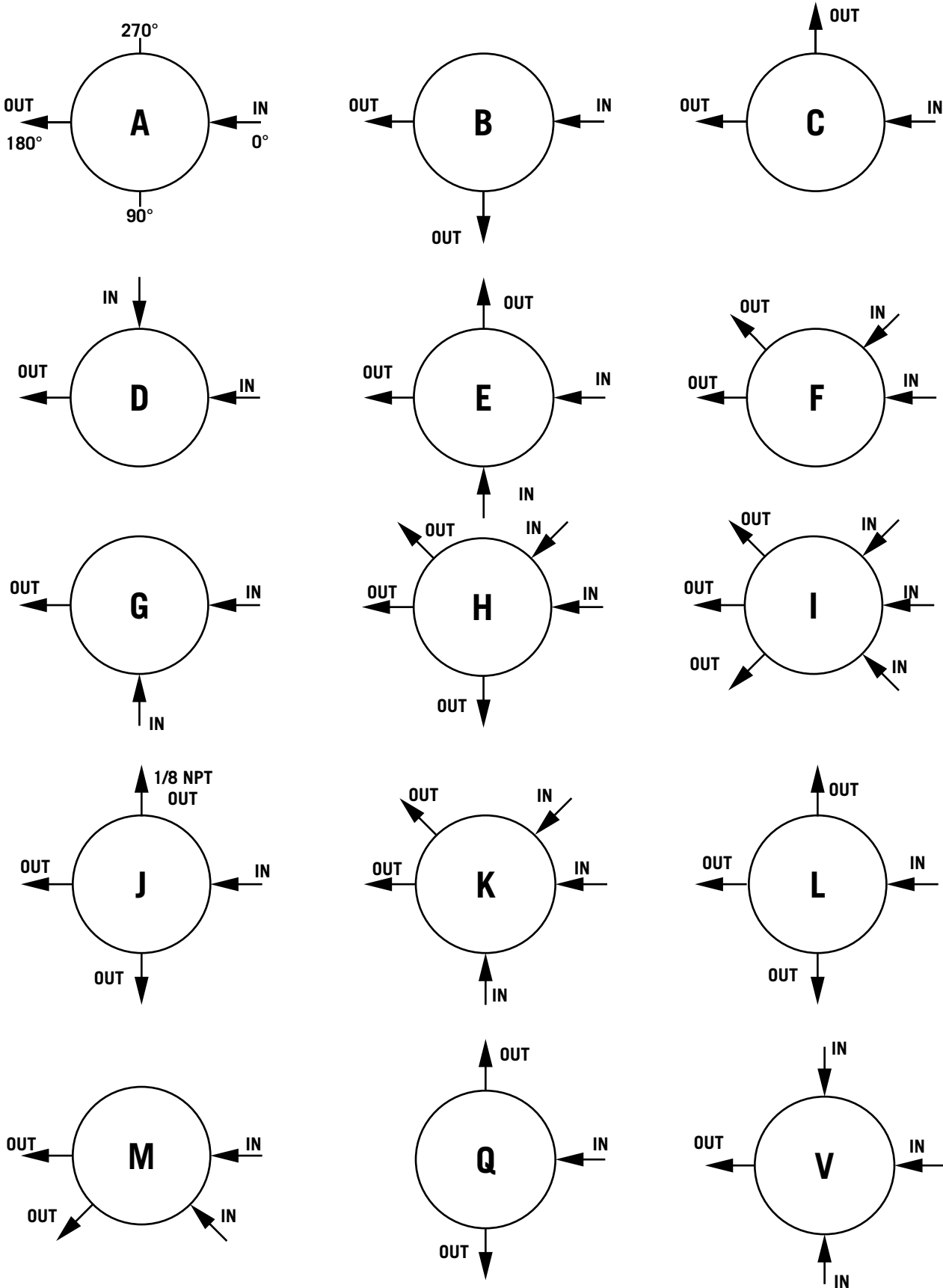
For flow curve charts, visit <http://www.goreg.com>.

# High Sensitivity Back Pressure Regulators

## *Outline and Mounting Dimensions*



# Port Locations (Back Pressure Regulators)

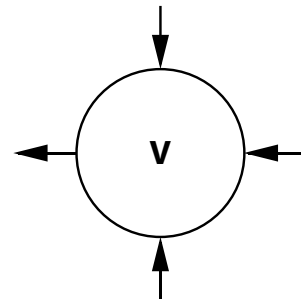
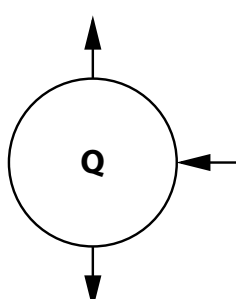
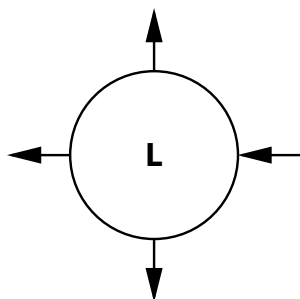
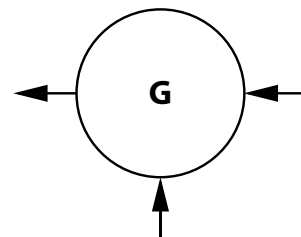
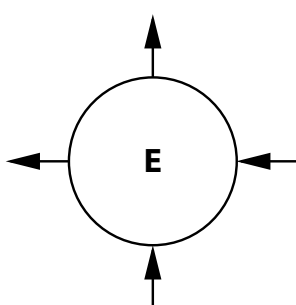
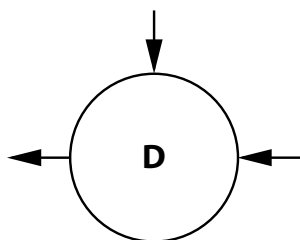
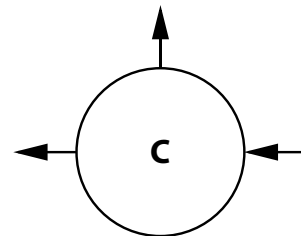
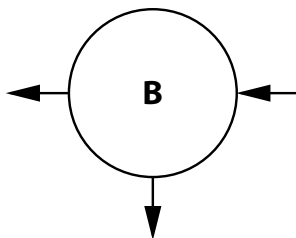
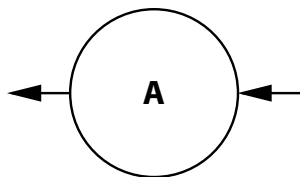


LOCATION OF PORTS FROM TOP VIEW

# Porting Options for LB-1 Back Pressure Valve

Arrow pointing toward body is inlet, arrow pointing away from body is outlet.

## LOCATION OF PORTS FROM TOP VIEW



**SURFACE MOUNT STYLES**  
requires "Surface Mount" port type connections

**#1**

Center port is outlet, all other ports are inlets.  
Location of ports from bottom view